# N8300A-03 <u>S E R V I C E N O T E</u>

Supersedes: NONE

# N8300A Wireless Networking Test Set

Serial Numbers:

MY47480113, MY47480123, MY47480127, MY47480132, MY47480133, MY47480135, MY47480136, MY47480141, MY47480142, MY47480143, MY47480144, MY47480145, MY47480146, MY47480148, MY47480149, MY47480152, MY47480153, MY47480154, MY47480155, MY47480159, MY47480166

# Batch Related Component Issue May Result In A Non-Functioning Instrument

Parts Required: P/N	Description	Qty.
0180-4536	Capacitor, 10uF 35V	2

# ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:				
MODIFICATION RECOMMENDED				
ACTION CATEGORY:	[[]] ON SPECIFIED FAILURE X AGREEABLE TIME	STANDARDS LABOR: 4.0 Hours		
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE X SERVICE CENTER [[]] CHANNEL PARTNER	SERVICE [[]] RETURN INVENTORY: [[]] SCRAP [[]] SEE TEXT	USED [[]] RETURN PARTS: [[]] SCRAP [[]] SEE TEXT	
AVAILABILITY:	AVAILABILITY: PRODUCT'S SUPPORT LIFE NO CHARGE AVAILABLE UNTIL: 01-AUG-2010		: 01-AUG-2010	
AUTHOR: FC		PRODUCT LINE: PN		
ADDITIONAL INFORMATION:				

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#### Situation:

A functional and potential reliability concern due to a batch related component issue has been identified on some of the Source Assemblies internal to the N8300A Wireless Networking Test Set. This identified issue can cause the N8300A to report that the source hardware is missing. No safety issue exists due to this component issue, only the concern that the N8300A could not operate properly.

Only instruments with the serial numbers identified in this Service Note are suspected of having this batch related component issue.

#### Solution/Action:

#### Step 1: Externally inspect the instrument to see if it has already been repaired.

(Note: This can be checked by the customer prior to contacting Agilent).

Check the rear panel serial tag for a small black inspection dot (see image below). If a black dot is present, similar to what is depicted, then the instrument has been repaired already, and no further action is required.



**Inspection Dot** 

If the dot is not present then the instrument must be returned to Agilent; contact information is available at: http://www.agilent.com/find/assist

If you do not have access to the Internet, or you prefer, please contact your Agilent Field Engineer.

Reference Service Note N58300A-03 as the reason (problem description) for why the instrument is being returned for service.

### Step 2: Internally inspect the instrument, and repair it if necessary.

(Note: This can only be carried out at an Agilent Service Center).

- (a) If the instrument cannot be powered-on, then it has a fault that is unrelated to this Service Note. This fault must be located and repaired before proceeding any further.
- (b) Remove the external covers from the instrument, and check the serial number of the Source Assembly (see image below for location and example).



# **Serial Number Location**

# Example:

The serial number is the last 11 digits of the identification tag. In the following example the serial number is 23072600162.



Serial number format

- (c) If the Source Assembly serial number falls within the range of 23080500002 to 23081200228 then proceed to (f).
- (d) If the Source Assembly serial number does not match the serial numbers listed, then use a permanent marker to place a black dot on the serial tag as depicted in Step 1. Doing so will assist in future quick recognition that a specific unit has been inspected or repaired.
- (e) Re-fit the external cover to the instrument, and power it on to ensure it is functioning without displaying any errors.
  - If any errors are present, then the instrument has a fault that is unrelated to this Service Note.
  - If the instrument has no errors, then it can be returned to the customer; adjustment is not required.
- (f) Carefully remove the Source Assembly from the instrument.



(g) Inspect C408 (10uF, 0180-4536) on the Top Side of the Source Assembly for lot code 712H2:

(h) Inspect C409 (10uF, 0180-4536) on the Bottom Side of the Source Assembly for lot code 712H2:



- (i) If parts are found with lot code **712H2**, replace the part with part number 0180-4536. Refer to the **Removing and Replacing Parts** section for soldering instructions.
- (j) If neither of the capacitors have lot code 712H2, or after the suspect capacitor(s) are replaced, reassemble the N8300A.

- (k) Use a permanent marker to place a black dot on the serial tag as depicted in Step 1. Doing so will assist in future quick recognition that this instrument has been inspected or repaired.
- (1) The instrument must now be fully adjusted & verified using Agilent's N7833A TME software package.

## **Removing and Replacing Parts**

- (m) Place the board on an ESD work surface.
- (n) Place the pencil tip (set to no more than 370°C) against the bonding lead on the side of the capacitor and apply a slight upward pressure. As soon as the solder melts, the cap end should lift slightly off the pad.



- (o) Place the pencil tip of the soldering iron against the other bonding lead of the capacitor and apply slight pressure. As soon as the solder melts the capacitor should break-free from the pad.
- (p) Remove the capacitor using tweezers, and clean the solder pads using 'Solder Wick', or a similar product.
- (q) Apply a small amount of new solder to the pad.
- (r) Place the new capacitor over the solder pads, with the striped end of the capacitor on the pad outlined on the PC board with a white box.
- (s) Use tweezers to apply pressure to the capacitor, and then heat one end of the capacitor until the solder flows and the capacitor rests on the pad.
- (t) While still applying pressure with the tweezers, heat the other end of the capacitor until the solder flows and the capacitor rests on the solder pad.
- (u) Inspect and, if needed, apply additional solder to each pad; be careful not to damage either pad.
- (v) Once the parts have been replaced on the Source Assembly, then return to (j).